National Aeronautics and Space Administration

Goddard Space Flight Center

Greenbelt, MD 20771



November 4, 2003

Reply to Attn of:

429

TO:

NASA Headquarters

Attn: Y/Associate Administrator for Earth Science

FROM:

100/Director

SUBJECT: NPOESS Preparatory Project (NPP) Mission Confirmation Readiness

Review (MCRR)

The Goddard Program Management Council (GPMC), chaired by the Deputy Director, conducted a NPP MCRR on August 26, 2003. The review included a Science Overview, Mission Overview, Non-Advocate Review (NAR) report, and Systems Management Office (SMO) assessment.

The MCRR resulted in four action items (Enclosure 1). A delta MCRR was held on September 2, 2003, to further discuss the actions that came from the MCRR. The delta MCRR resulted in five additional action items (Enclosure 2). All action items from these reviews have been closed. Included was a NASA Programs and Project Management Processes and Requirements, NASA Procedure and Guidelines 7120.5B, compliance audit that was completed by the SMO. Both the NAR and SMO recommended proceeding with implementation pending Earth Science Enterprise approval of the NPP Final Implementation Agreement with the Integrated Program Office and National Oceanographic and Atmospheric Administration (NOAA).

The NASA NPP mission full-cost development baseline of \$545.8M includes all approved efforts through launch plus 90 days, excluding NASA Corporate General and Administrative and Kennedy Space Center (KSC) full cost burdens. Code M will centrally fund the KSC full cost elements. The Project will work with Code Y to initiate the Science Data Segment (SDS) development, set priorities, and define an implementation approach consistent with the allocated, not-to-exceed \$10M budget. It is understood that additional funding above the \$545.8M total may be made available by Code Y to support the SDS development as lower level requirements are clarified.

The GPMC notes that in the unique inter-Agency partnership upon which the NPOESS program is built, NASA is unusually vulnerable to launch delays caused by external factors that are beyond the Agency's ability to control. These unique external factors need to be closely monitored through the Tri-Agency Steering Committee and the Executive

Committee to ensure that the stakeholders' interests are preserved. The reserves carried in the NPP budget plan do not cover the full spectrum of these external risks, and have been developed to cover only the risks associated with factors that are within NASA's control.

The GPMC recognizes that requirements for mission end of life disposal continue to evolve. Pending completion of a Johnson Space Center debris analysis, NPP may require controlled re-entry. Although the spacecraft has been designed to perform a controlled re-entry, the calculated Probability of Success (Ps) is .95, compared with a NASA guideline of .99. The NPP budget does not accommodate spacecraft redesign to meet a Ps of .99. The Project will continue to work closely with Code Y to determine the appropriate application of the NASA guideline.

Currently, NOAA is experiencing funding uncertainty for augmentations to support the data Archive and Distribution Segment (ADS) of the NPP mission. The ADS is a critical element of the NPP mission and without it, the mission has no long-term archive and distribution capability. For purposes of this Mission Confirmation, GSFC assumes that the uncertainty will be resolved at the inter-Agency level, and that NOAA's ADS capability will be ready to support the NPP launch.

In summary, the GPMC recommends that the NPP mission be confirmed for implementation as planned.

2 Enclosures

cc:

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